

FIG. 1

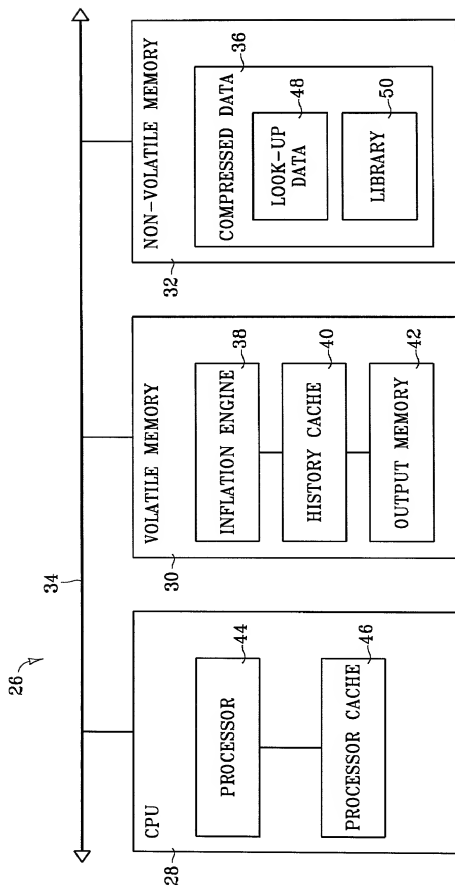


FIG. 2

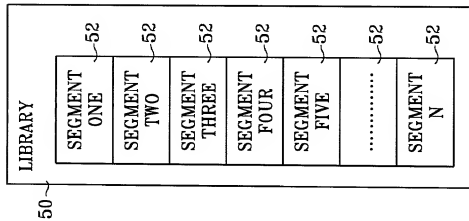


FIG. 3

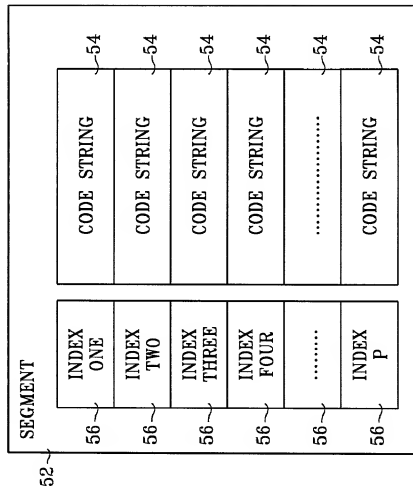


FIG. 4

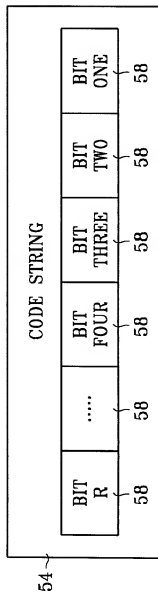


FIG. 5

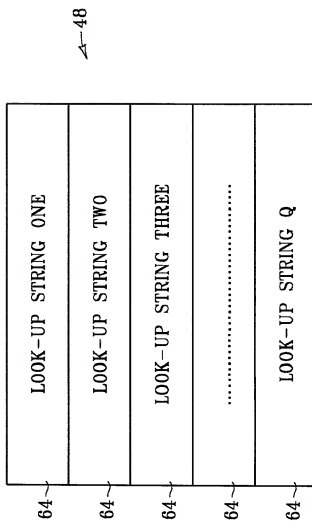


FIG. 7

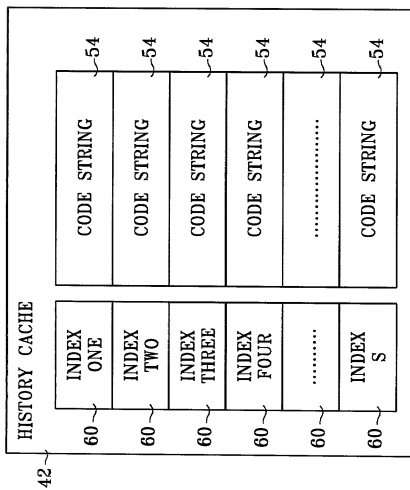


FIG. 6

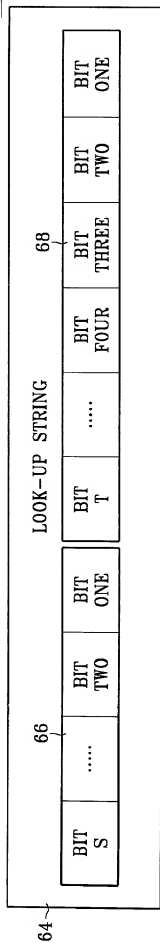


FIG. 8

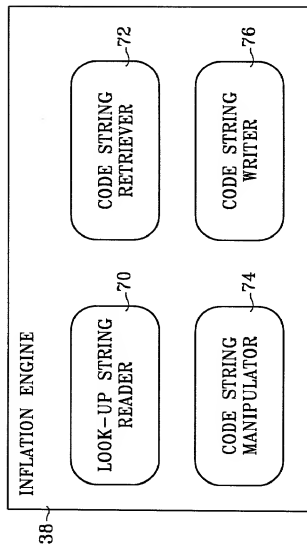


FIG. 9

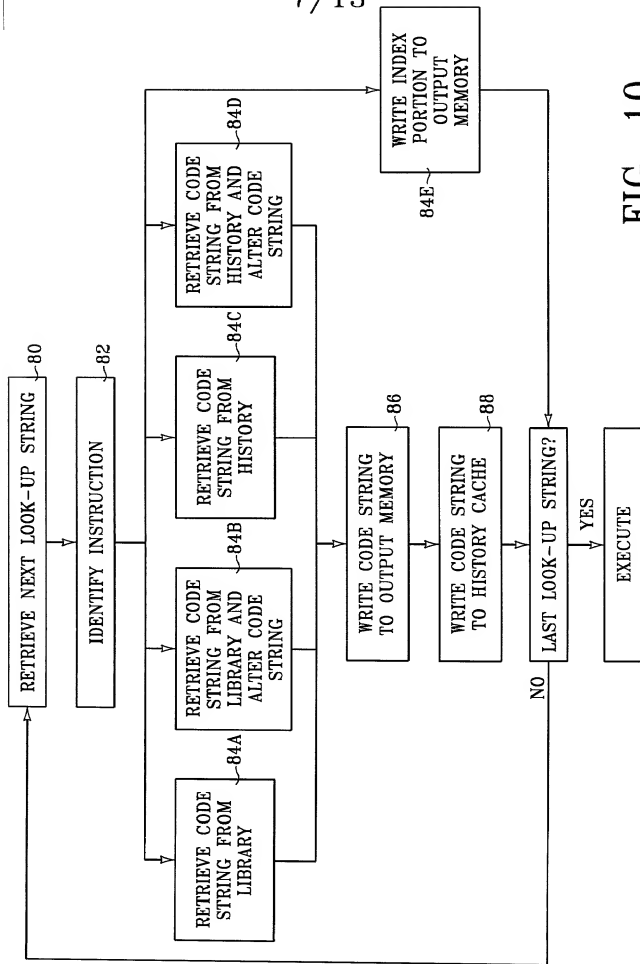


FIG. 10

52	SEGMENT 0000	16 INDEXED POSITIONS 4 BIT INDEX
52	SEGMENT 0001	32 INDEXED POSITIONS 5 BIT INDEX
52	SEGMENT 0010	64 INDEXED POSITIONS 6 BIT INDEX
52	SEGMENT 0011	128 INDEXED POSITIONS 7 BIT INDEX
52	SEGMENT 0100	256 INDEXED POSITIONS 8 BIT INDEX
52	SEGMENT 0101	512 INDEXED POSITIONS 9 BIT INDEX
52	SEGMENT 0110	1024 INDEXED POSITIONS 10 BIT INDEX
52	SEGMENT 0111	2048 INDEXED POSITIONS 11 BIT INDEX
52	SEGMENT 1000	4096 INDEXED POSITIONS 12 BIT INDEX
52	SEGMENT 1001	8192 INDEXED POSITIONS 13 BIT INDEX

FIG. 11

56	0000	CODE STRING	54
56	0001	CODE STRING	54
56	0010	CODE STRING	54
56	0011	CODE STRING	54
56	0100	CODE STRING	54
56	0101	CODE STRING	54
56	0110	CODE STRING	54
56	0111	CODE STRING	54
56	1000	CODE STRING	54
56	1001	CODE STRING	54
56	1010	CODE STRING	54
56	1011	CODE STRING	54
56	1100	CODE STRING	54
56	1101	CODE STRING	54
56	1110	CODE STRING	54
56	1111	CODE STRING	54

52
FIG. 12

OPERATION	LOOK-UP STRING		TOTAL BITS
	INSTRUCTION PORTION 66	INDEX PORTION 68	
<i>Library Retrieve/Write</i>	0000	0000 through 1111	8
<i>Library Retrieve/Write</i>	0000	0000 through 1111	9
<i>Library Retrieve/Write</i>	0000	000000 through 111111	10
<i>Library Retrieve/Write</i>	0000	0000000 through 1111111	11
<i>Library Retrieve/Write</i>	0000	00000000 through 11111111	12
<i>Library Retrieve/Write</i>	0000	000000000 through 111111111	13
<i>Library Retrieve/Write</i>	0000	0000000000 through 1111111111	14
<i>Library Retrieve/Write</i>	0000	00000000000 through 11111111111	15
<i>Library Retrieve/Write</i>	0000	000000000000 through 111111111111	16
<i>Library Retrieve/Write</i>	0000	0000000000000 through 1111111111111	17

FIG. 13

Operation	LOOK-UP STRING		Total Bits
	INSTRUCTION PORTION 66	INDEX PORTION 68	
<u>Library</u> -Retrieve- -Alter 1 BIT- -Write-	1011	00000000000000 through 111111111111 -plus- 00000 through 11111	23 Position Bit
<u>Library</u> -Retrieve- -Alter S127- -Write-	1100	00000000000000 through 111111111111 -plus- 00000000 through 11111111	26 Position Byte
<u>Library</u> -Retrieve- -Alter 1 BYTE- -Write-	1101	00000000000000 through 111111111111 -plus- 00000000 through 11111111	26 Position Byte
<u>Library</u> -Retrieve- -Alter 2 BITS- -Write-	11100	00000000000000 through 111111111111 -plus- 00000 through 11111 -plus- 00000 through 11111	29 Position Bit Bit

FIG. 14

64		LOOK-UP STRING			
Operation	INSTRUCTION PORTION	INDEX PORTION	Total Bits	Position	Total Bits
<u>History</u>					
-Retrieve-					
-Write-					
<u>History</u>					
-Retrieve-					
-Duplicate-					
<u>History</u>					
-Retrieve-					
-Alter 1 BIT-					
-Write-					

FIG. 15A

64 LOOK-UP STRING		68		Total Bits
Operation	INSTRUCTION PORTION	INDEX PORTION		
<u>History</u>			Position	
-Retrieve-	11101	0000000000000000 through 1111111111111111	Times Dup.	22
-Write-		-plus- 000 through 111		
<u>History</u>			Position	
-Retrieve-	11111	0000000000000000 through 1111111111111111	Bit	24
-Alter 1 BIT-		-plus- 00000 through 11111		
-Write-				
<u>History</u>			Position	
-Retrieve-	111101	0000000000000000 through 1111111111111111	Bit	30
-Alter 2 BITS-		-plus- 00000 through 11111	Bit	
-Write-		-plus- 00000 through 11111		

FIG. 15B